Golden Gate Corridor Transportation Facilities Plan

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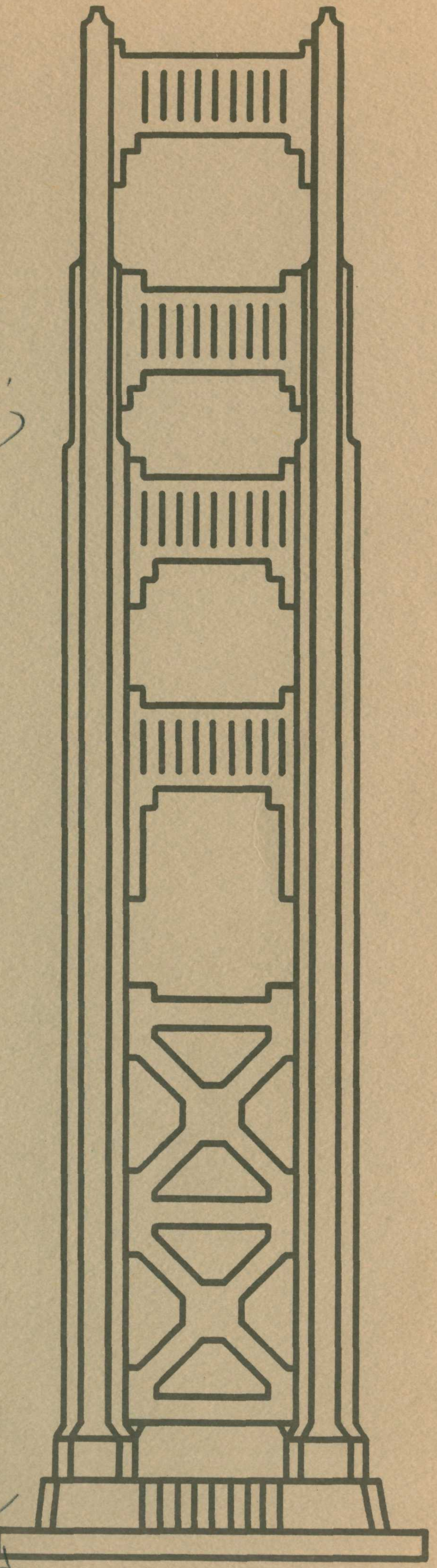
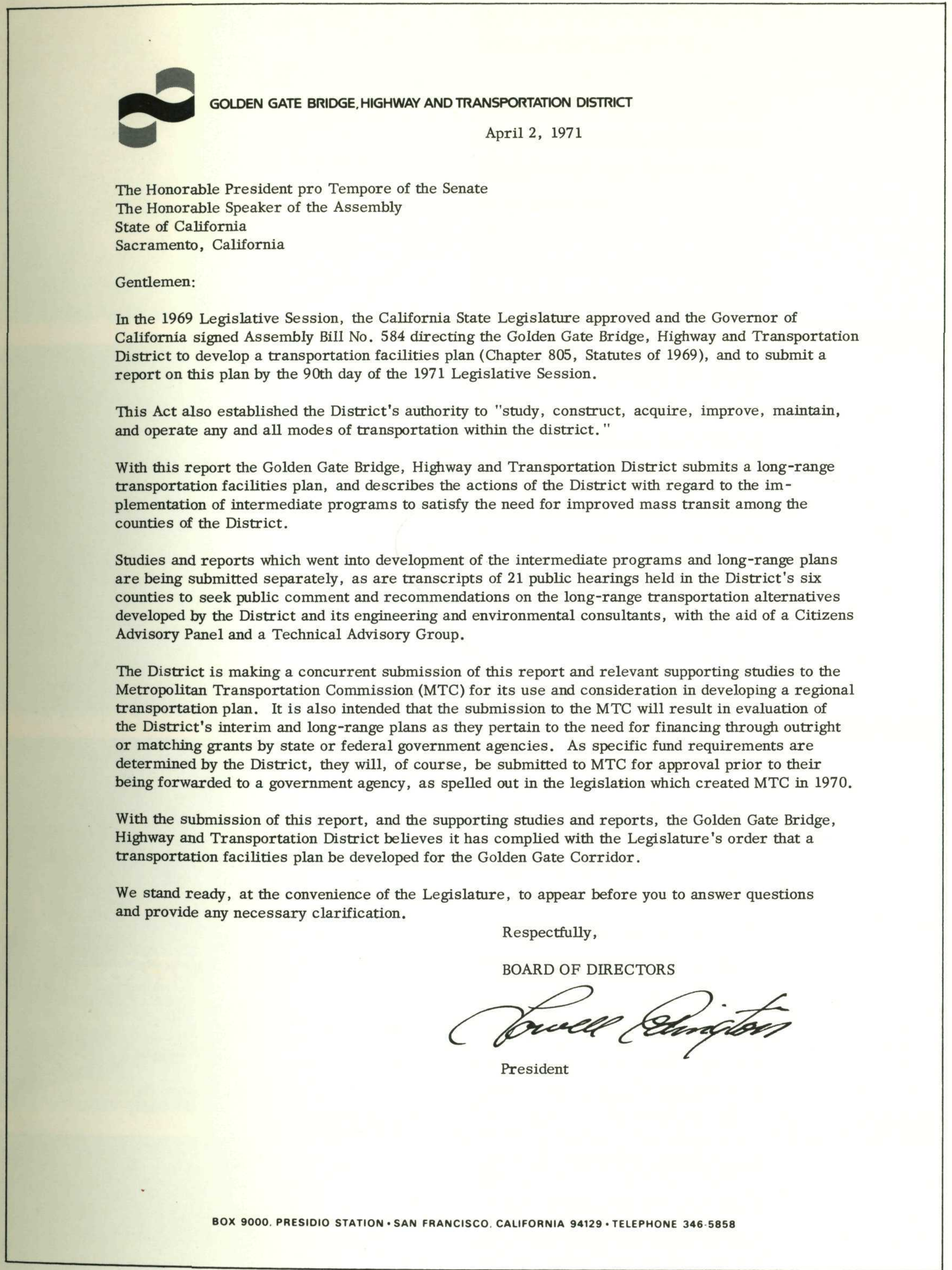


Report to
California State Legislature
April 3, 1971

Golden Gate Bridge, Highway and Transportation District

Golden Gate Bridge, Highway and Transportation District



GOLDEN GATE BRIDGE, HIGHWAY AND TRANSPORTATION DISTRICT

April 2, 1971

The Honorable President pro Tempore of the Senate
The Honorable Speaker of the Assembly
State of California
Sacramento, California

Gentlemen:

In the 1969 Legislative Session, the California State Legislature approved and the Governor of California signed Assembly Bill No. 584 directing the Golden Gate Bridge, Highway and Transportation District to develop a transportation facilities plan (Chapter 805, Statutes of 1969), and to submit a report on this plan by the 90th day of the 1971 Legislative Session.

This Act also established the District's authority to "study, construct, acquire, improve, maintain, and operate any and all modes of transportation within the district."

With this report the Golden Gate Bridge, Highway and Transportation District submits a long-range transportation facilities plan, and describes the actions of the District with regard to the implementation of intermediate programs to satisfy the need for improved mass transit among the counties of the District.

Studies and reports which went into development of the intermediate programs and long-range plans are being submitted separately, as are transcripts of 21 public hearings held in the District's six counties to seek public comment and recommendations on the long-range transportation alternatives developed by the District and its engineering and environmental consultants, with the aid of a Citizens Advisory Panel and a Technical Advisory Group.

The District is making a concurrent submission of this report and relevant supporting studies to the Metropolitan Transportation Commission (MTC) for its use and consideration in developing a regional transportation plan. It is also intended that the submission to the MTC will result in evaluation of the District's interim and long-range plans as they pertain to the need for financing through outright or matching grants by state or federal government agencies. As specific fund requirements are determined by the District, they will, of course, be submitted to MTC for approval prior to their being forwarded to a government agency, as spelled out in the legislation which created MTC in 1970.

With the submission of this report, and the supporting studies and reports, the Golden Gate Bridge, Highway and Transportation District believes it has complied with the Legislature's order that a transportation facilities plan be developed for the Golden Gate Corridor.

We stand ready, at the convenience of the Legislature, to appear before you to answer questions and provide any necessary clarification.

Respectfully,

BOARD OF DIRECTORS

Lowell Edington

President

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Summary and Contents

The Charge and the Challenge. 5

The enactment of Assembly Bill No. 584 in 1969 by the California State Legislature and the Governor of California charged the Golden Gate Bridge, Highway and Transportation District with the responsibility of confronting, with action and planning, the growing traffic congestion in the Golden Gate Corridor. The most challenging and sobering statistic: traffic volume on the Golden Gate Bridge and its approaches has grown from 3½ to 33 million vehicles a year since the Bridge opened, though the Bridge's traffic capacity is adequate for only 25 million. The daily average of traffic volume now reaches past 90,000. This congestion is a growing obstruction to the area's economic and environmental welfare.

The Bridge District in History. 8

The Golden Gate Bridge District was formed in 1928, comprising all of San Francisco, Marin, Sonoma, and Del Norte Counties, most of Napa County, and part of Mendocino County. After years of inaction by State and Federal levels of government, the citizens of the District took the risks and invested the funds that made the Bridge a reality. The Bridge's opponents and detractors said "it could never be built." It was opened to traffic in 1937 and has operated successfully and solvently ever since, quickly becoming not just a world-famous landmark, but a vital artery of livelihood, recreation, commerce and communications between San Francisco and the Redwood Empire counties to the north.

Managing the Traffic. 10

Growth in population, suburban commuting, and recreational travel have been key factors in traffic pressures on the Golden Gate Bridge. Before and since its 1969 legislative mandate, the Bridge District has moved steadily forward to provide interim solutions, and the foundations of long-range solutions, for the transportation squeeze in the Golden Gate Corridor: reversible lanes, one-way tolls, reduced bus tolls, a stronger Bridge structure, studies of Bridge capacity. Studies were made of Bridge expansion, and plans were made for speedier toll collection through toll plaza modernization. Then, under the new authority granted by the Legislature, studies and implementation of new public bus and ferry systems were initiated.

Interim Golden Gate Bus System. 12

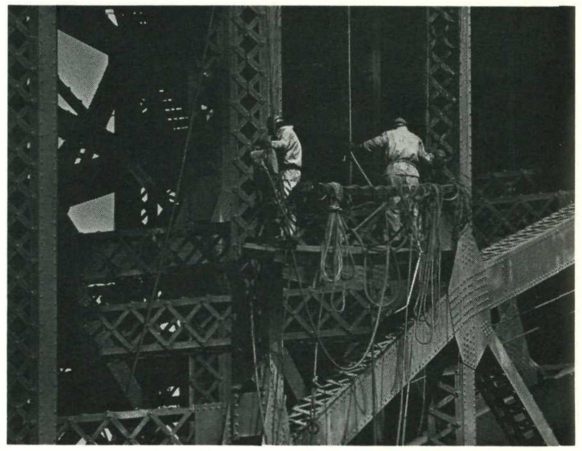
Following the studies started in 1965 by the Marin County Transit District (MCTD), the Bridge District in 1969 was given the function of implementing MCTD's studies and goals to establish a "home to work" commute bus system. With the assistance of a citizens committee, strict criteria of rider comfort, visual quality of vehicles, anti-pollution standards, and day-round scheduling were established. Specifications for 152 buses were ready for bid on March 17, 1971. Initial operation of the interim Golden Gate Bus System is expected to begin in late 1971. Meanwhile, the District is operating two feeder bus systems serving ferryboat ports, and a local service in Central and Northern Marin County.

Fleet Ferry System. 16

Passage of A. B. 584 enabled the Bridge District to act at last upon the entreaties of the San Francisco and Marin Boards of Supervisors, and of numerous communities and civic groups, to study and inaugurate a public ferryboat service between Marin County ports and San Francisco. Envisioning a service integrated in a balanced public transportation system, the Bridge District plans call at the outset for four new 25-knot ferryboats, with the ferry landings in San Francisco, Sausalito, and Central Marin served by feeder buses and shuttle-service parking. The District ferryboat in operation from Sausalito in six months carried over 350,000 passengers, equivalent to about 260,000 automobiles on the Bridge.

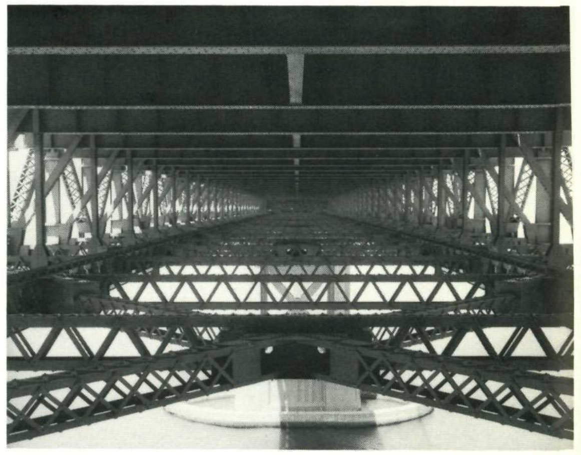
The Bridge System. 20

Through a constant program of inspection, maintenance, and repair, the Golden Gate Bridge has remained a model of safety and strength. A lateral bracing system below the Bridge thoroughfare was completed in 1954, greatly increasing the Bridge's strength and durability. An extensive engineering study completed in 1968 commended the Bridge's maintenance program and recommended only one major renewal project: replacement of the vertical suspender cables and their connection to the span deck. First stage of this work will begin in 1971. With its renewal completed, the Bridge's life span can be projected beyond 200 years! Toll plaza modernization is also being done, to speed auto travel.



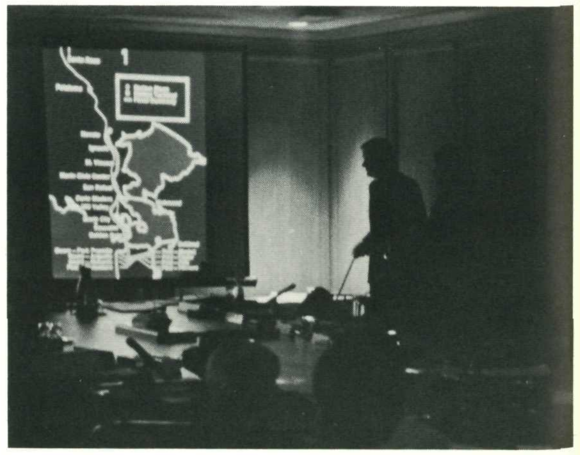
The Question of a Transit Deck. 24

A series of studies of the Golden Gate Bridge—dating back as far as 1961—added up to a number of conclusions about the Bridge's capacity: a transit deck could not sustain the type of system proposed by Bay Area Rapid Transit (BART) without risk of shortening the life of the structure, but could support four lanes of light vehicular traffic or a relatively lightweight transit system such as more recent designs and technologies are developing. Because the lateral bracing system installed in 1954 already provides the framing for incorporating a lower deck, the Bridge's famous profile and general appearance would be virtually unchanged by the addition of a lower deck for transit only.



Transportation Facilities Study Program. 26

The programs and progress of the Bridge District in the 1960s were the context in which the District, following its legislative mandate, undertook studies to develop a long-range transportation facilities plan. To insure a planning program with maximum public involvement, the District established a study team made up of two prime consulting firms—engineering and environmental—and two advisory groups, one of interested private citizens and organizations, the other composed of professional representatives of governmental agencies. Together, they reviewed earlier studies and concepts, narrowing the study's scope from 25 concepts down to five alternatives, and spent a year completing the study.



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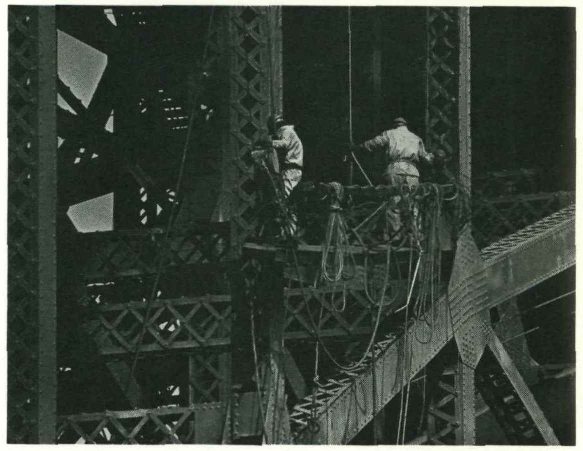

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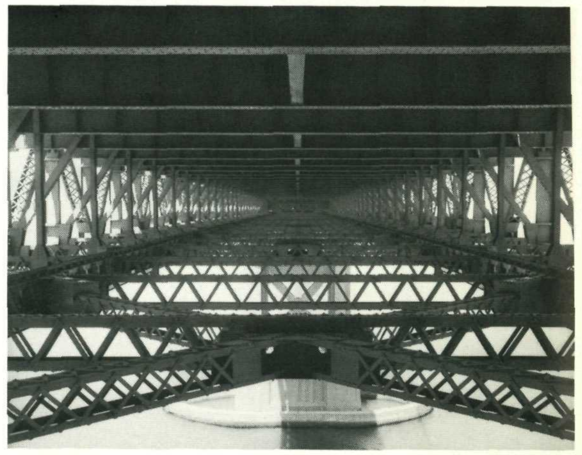

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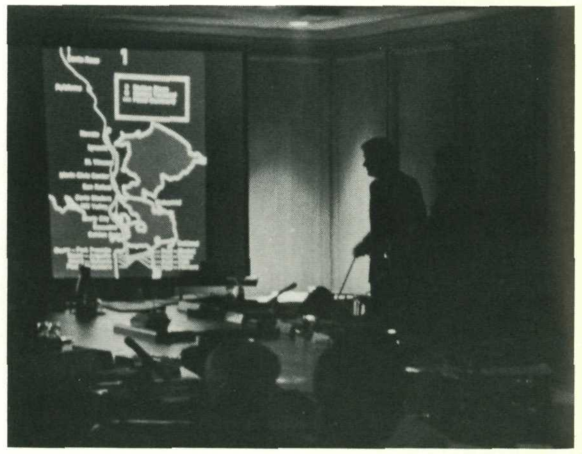
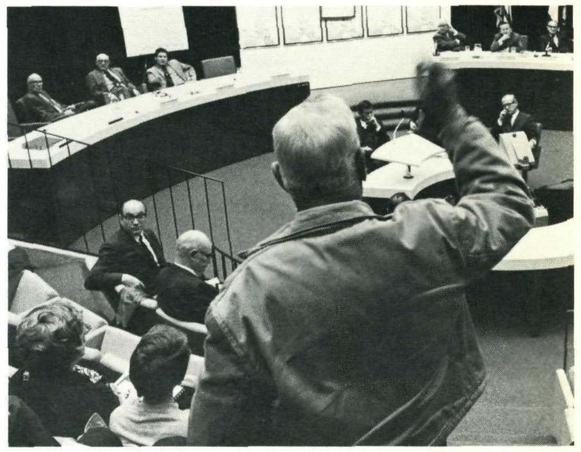


The Five Alternatives. 30

The consultants and advisory groups analyzed the five alternative concepts for long-range transportation facilities. They weighed types of systems, costs, patronage, and environmental and socio-economic impacts. These were all related to projections of population and employment. The systems ranged from exclusive busways and fixed guideways on a transit deck of the Bridge, to fixed guideways in tubes under the Bay. All the systems had a southern terminal in San Francisco's central business district, interfaced with BART. When the comprehensive data was completed, the District published summaries, and the material was furnished to the public prior to and in the course of public hearings.

The Public Hearings. 36

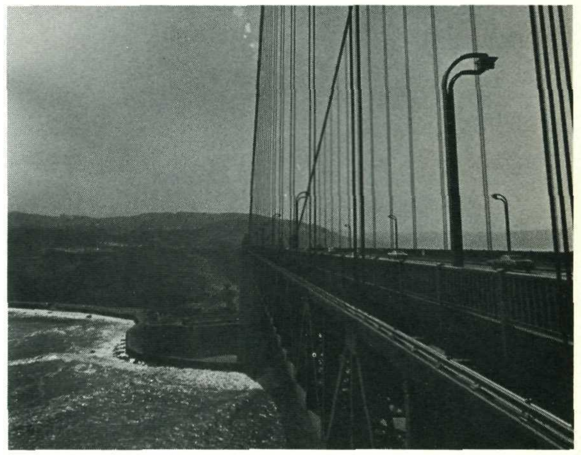
To involve District communities and citizens in the planning for transportation facilities, the District Directors took the five alternatives directly to the public in a series of 21 hearings in six counties, conducted along the line of town meetings. Over 1,200 citizens took an active part in these dialogues; transcripts of comments, questions, and suggestions were made. The participation of citizens contributed valuable insights. When the hearings concluded early in February, 1971, Bridge Directors, staff, consultants, and Citizens Advisory Panel reviewed the public comments, and set about formulating a recommendation to the Legislature, with the goal of a balanced, coordinated transportation facilities plan.



The District's Recommendation. 41

The District project staff and its consultants felt strongly both the public concern about rigid, immutable plans, and their own conviction that the future planning and implementation must have a reasonable degree of flexibility. At issue were community environmental values, financial feasibility, and a changing transportation technology. The problem boiled down to: how to advance significantly without sacrificing flexibility?

Along with continued implementation of interim bus, ferry, and Bridge systems, the District recommends: A 10-year plan to implement a longer-range program to improve public transportation and at the same time "position" the District for later options. It is a phased program whose major elements are: ☐ Adaptability of rights-of-way either to busways or fixed guideways for train or train-like vehicles ☐ Underground route in San Francisco, terminating in central business district and interfacing with Muni and Bay Area Rapid Transit (BART) ☐ Construction of two-lane transit deck on Golden Gate Bridge, according to engineering studies calling for use of existing understructure without altering Bridge profile ☐ Use of buses as initial mode of transit ☐ Research and development of transit vehicles ☐ Working out of routings with local agencies ☐ Acquisition of agreed-upon rights-of-way ☐ The goal of a multi-modal, balanced public transportation system, with the District continuing as a sub-regional agency responsible for coordinated development and management.



Appendices. 55

Bibliography of studies, reports, and references. Acknowledgements.

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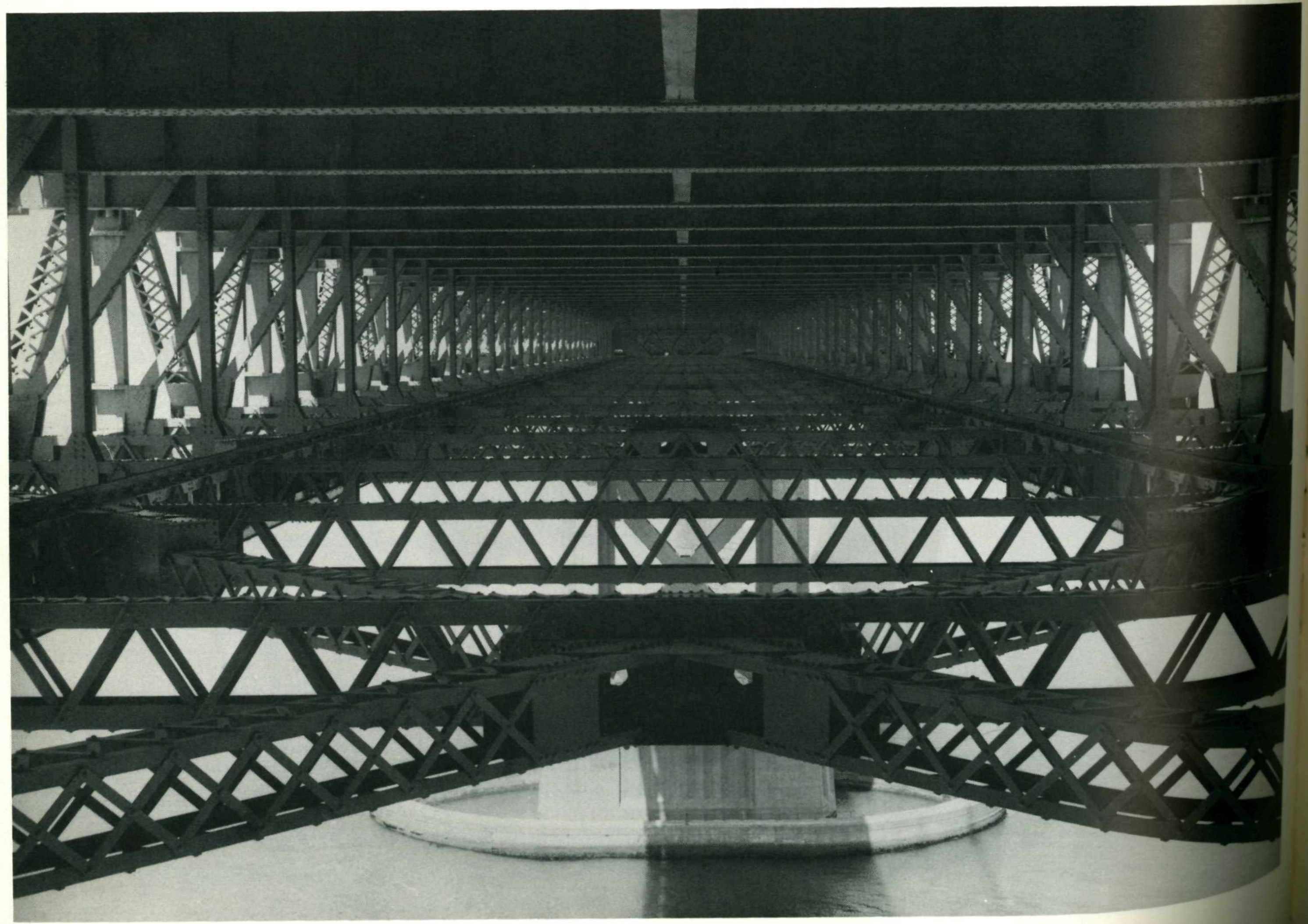
The Question of a Transit Deck

Studies of the feasibility of adding a transit deck to the Golden Gate Bridge date back a decade. In March of 1961 an engineering study for the Bay Area Rapid Transit District (BART) concluded it was practical to add two rapid transit tracks below the Bridge roadway. Clifford Paine, who had been principal engineer in designing and constructing the Bridge, reviewed the report for the Bridge District and recommended against having BART's proposed types of rapid transit trains operate over the Bridge.

In January, 1962, with the concurrence of BART, the District appointed O. H. Ammann, Frank M. Masters and N. M. Newmark as an Engineering Board to review the conflicting reports. The appointees had been nominated by the presidents of Massachusetts Institute of Technology and California Institute of Technology. The Engineering Board's report stated in part that "...the margin of safety would be decreased to a greater extent than is advisable (and) installation of (rail) rapid transit on the Golden Gate Bridge would lead to a decrease in the possible life of the bridge."

The rejection was based on the severity and vibrational impact of the loads created by BART-type trains and the way in which these loads are applied to a flexible, suspended structure.



In 1964 the District engaged the engineering firm of Ammann & Whitney to report on the feasibility of installing a lower deck for vehicular traffic. This study found that a lower deck for automobile traffic was feasible.

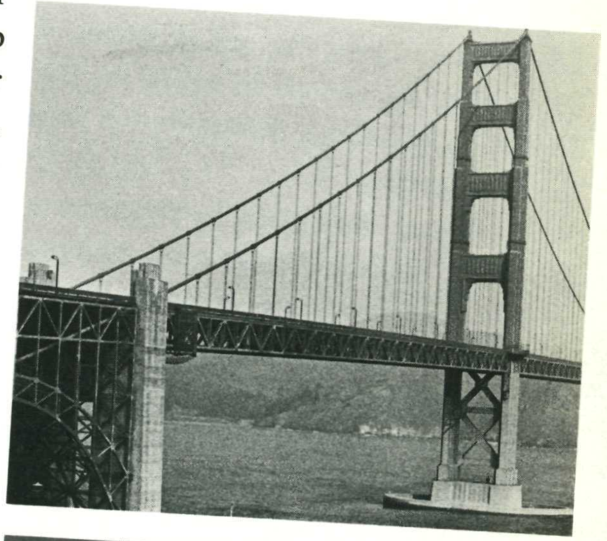
In 1965 the California State Department of Public Works began extensive studies of traffic problems and new crossbay links, and examined the question of adding a lower deck to the Golden Gate Bridge. The Department's final report, issued in May, 1967, stated that improvements of the existing Golden Gate Corridor, including as the first phase a transit deck on the Golden Gate Bridge, expanded highway approaches, and a bus rapid transit system, would provide adequate transportation services and was financially feasible.

In August, 1967, the District authorized Ammann & Whitney to proceed with the preliminary design of a lower deck. Their report, received in March of the following year, concluded that up to four vehicular traffic lanes could be safely constructed on a lower bridge deck with only moderate changes in the existing structure. They further concluded that one lane of H-13 load could be accommodated. Exterior appearance of the span would be virtually unchanged. The Bridge profile would be exactly the same.

Kaiser Engineers, in later studies, assumed that a two-lane, transit-only busway could be accommodated on a lower bridge deck safely according to the criteria recommended by Ammann & Whitney. At the insistence of the District, Kaiser included in its studies fixed guideway systems on a lower bridge deck, noting that rapid transit vehicle design and manufacturing technologies have reduced the ratio of vehicle weight per passenger since the first studies of a transit deck in 1962. Kaiser, therefore, assumed that trains of the future could be shorter and lighter than the originally proposed BART equipment.

The Bridge is capable of being used for a lower deck for transit vehicles. Within its present lower framing can be built a transit deck for buses or lighter-weight fixed guideway systems without undue stress on the span, and without changing the Bridge's appearance or shortening its life. The design would exclude the use of the deck for autos and confine the use to transit vehicles.

In sum, the Golden Gate Bridge is still the formidable link in a future mass transit system in the Golden Gate Corridor.



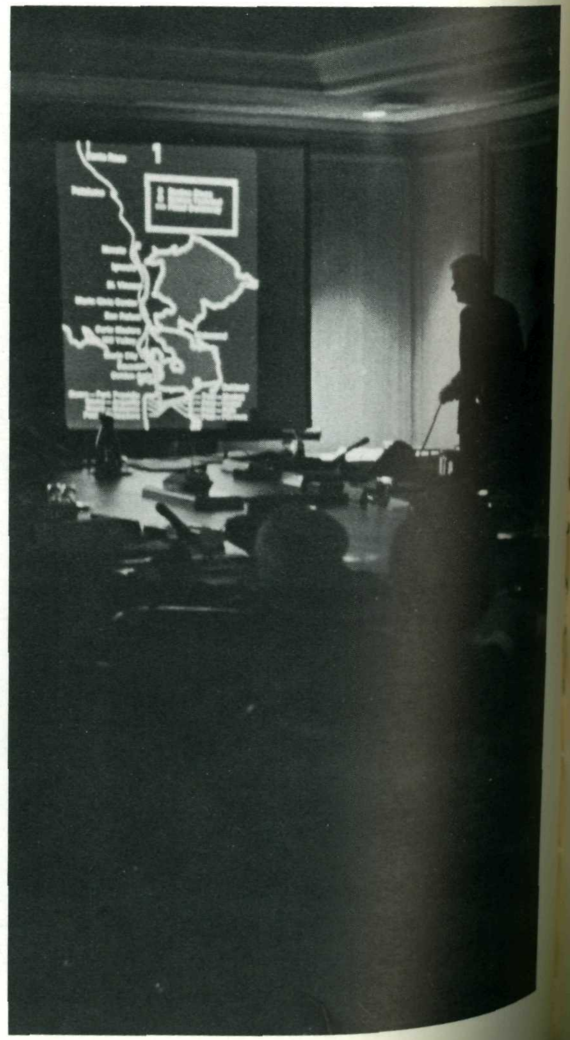
Transportation Facilities Study Program

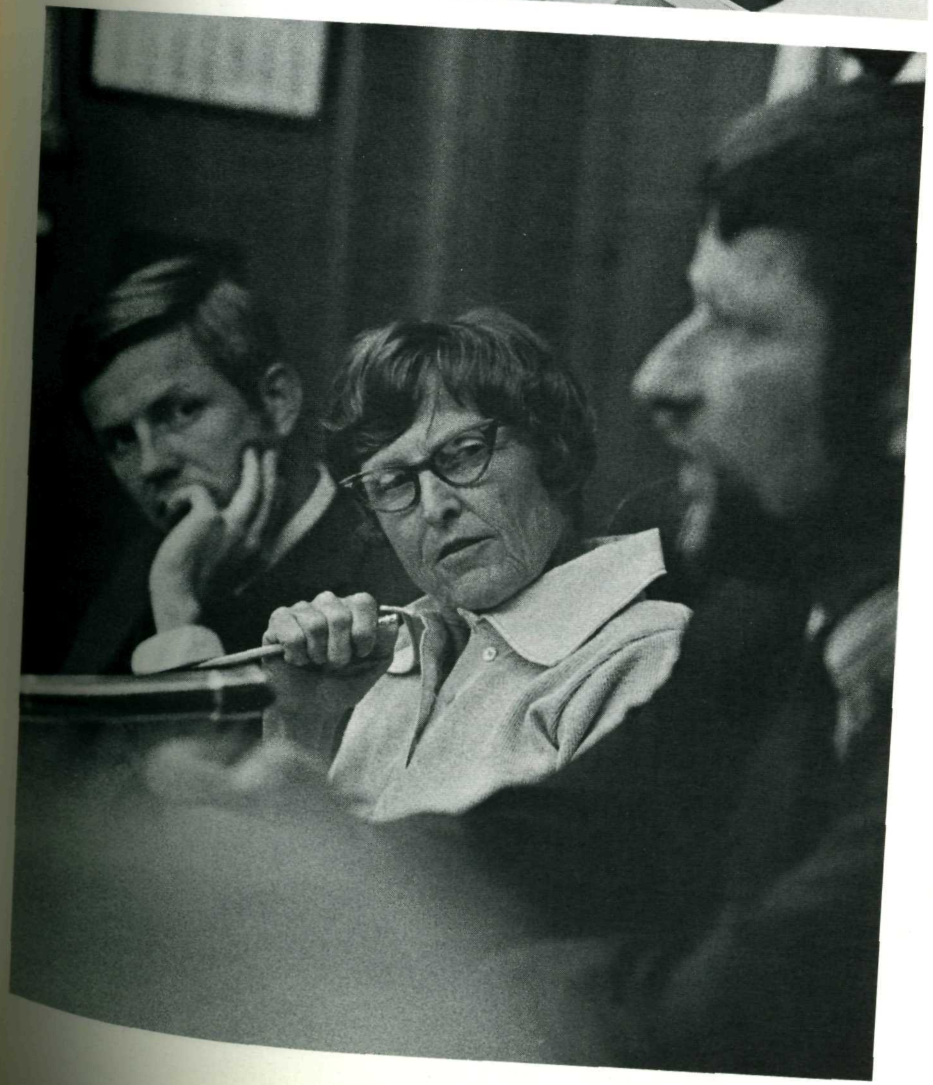
The programs, progress, and problems of the Bridge District in the 1960s were the context in which the District undertook studies to develop a long-range transportation facilities plan, as directed by the Legislature.

It was recognized by the Directors and Management that projects to alleviate Bridge traffic and provide intermediate systems of public transportation must have the flexibility to combine with and enhance a long-range rapid transit system.

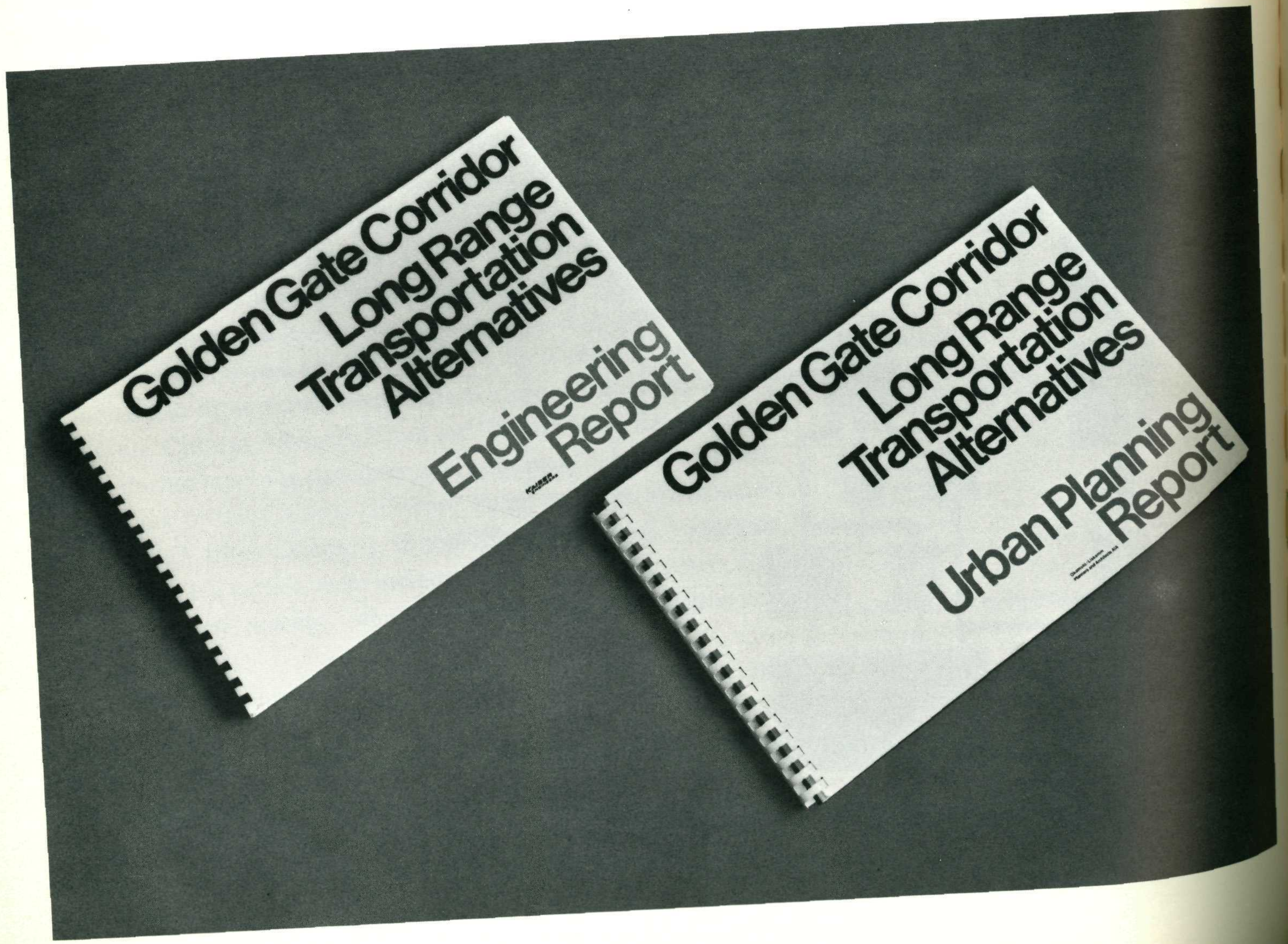
To conduct the studies, the District retained two prime consultants: Kaiser Engineers, to study the engineering and economic aspects; and Okamoto/Liskamm, Inc. to analyse socio-environmental and urban planning factors. In order to relate the studies closely to the desires and needs of the communities concerned, two advisory groups were formed: the Technical Advisory Group, composed of representatives of municipal, county, regional, and state government agencies; and the Citizens Advisory Panel (CAP).

The Citizens Advisory Panel was unique. More than 100 organizations and individuals representing a broad range of interests, viewpoints, and geographic areas were invited to participate in the transportation studies through study discussion groups, each of which focused on a particular issue related to transit. In turn, the study groups chose representatives (usually the study group chairman) to serve on the Citizens Advisory Panel in its collaboration with the District staff, consultants, and Technical Advisory Group.





The Five Alternatives



On the next two pages, the five alternatives are described and illustrated in their most basic form. The voluminous full reports of Kaiser Engineers and Okamoto/Liskamm, Inc. have been submitted to the Legislature as part of the master submissions prepared for each House.

It should be explained here that the consultants' reports dealt not just with the regional and area impacts of each alternative, but also analysed at great length the likely physical, economic, and socio-environmental effects on different sections and communities of the Golden Gate Corridor. During and following the studies, all these elements were carefully reconsidered by the Citizens Advisory Panel, by the District engineering and planning staff, and by the District's Board of Directors.

It should also be emphasized that the five alternatives were not meant to be the exact systems that might be built, but, rather, a group of examples to help the public identify a workable and acceptable goal, and to stimulate comments and criticism.

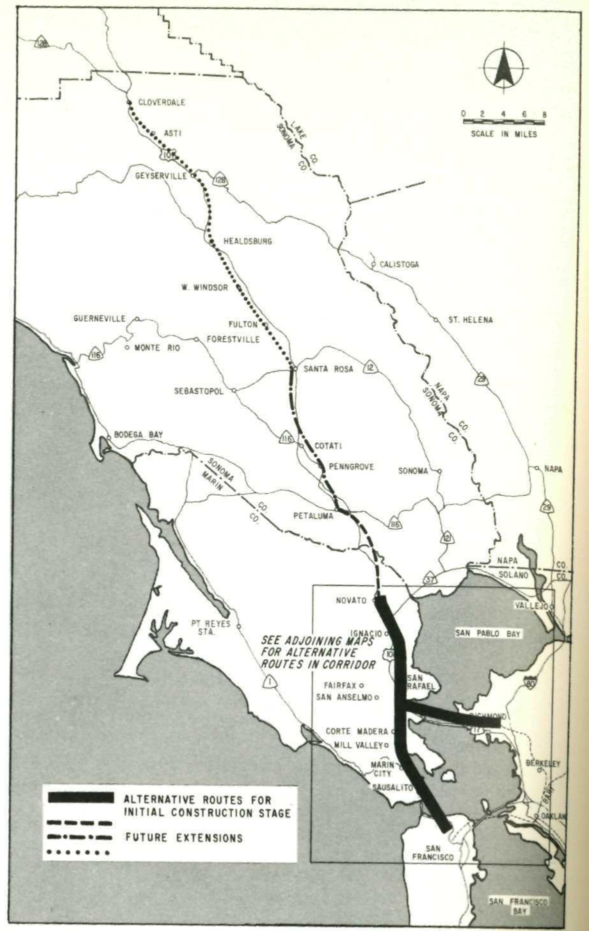
Here we wish merely to summarize the group of five alternatives which were the subject matter of subsequent public hearings and post-hearing review by the consultants, advisors, and the Bridge District.

All of the alternatives assumed a bus feeder system from community neighborhoods to the trunk line. In the case of fixed guideways (Alternatives 1, 2, and 4), passengers would have needed to transfer at the trunk line. In the case of exclusive busways (Alternative 3 and a segment of Alternative 5), the feeder buses could in most instances proceed onto the trunk line without the necessity of transfer by the passenger.

All systems had direct or feeder connections to Sonoma County and to the Richmond-San Francisco BART station.

The term "fixed guideway" covered a rapid transit system in which vehicles run on a fixed route but cannot operate off the route. The word "rail" was not used because trains could conceivably use conventional rail, air cushion, monorail, magnetic support, or other emerging technologies.

All trunk line systems assumed exclusive rights-of-way, and also assumed separation—above or below grade—from freeways and city streets. These alternatives assumed a lower bridge deck (for transit only), and two used an underwater tube across Golden Gate Strait.



LEGEND

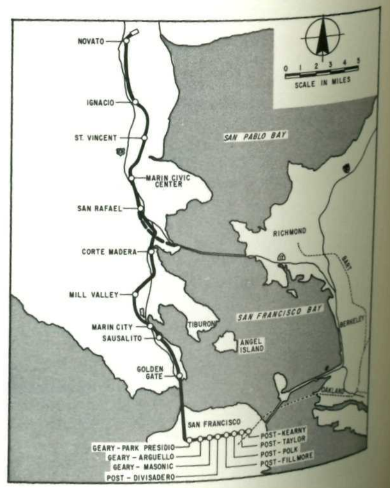
▬▬ FIXED GUIDEWAY

‒ ‒ ‒ ‒ EXCLUSIVE BUSWAY

─○─ STATION OR BUS STOP

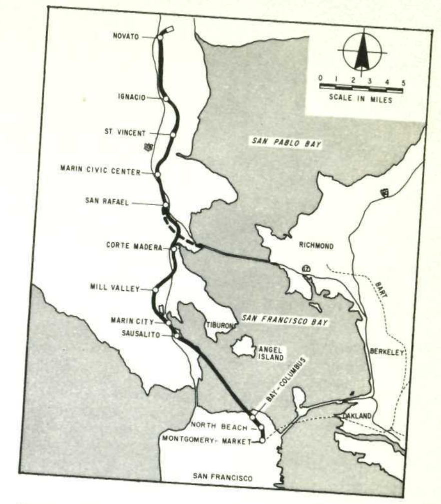
Alternative 1

Type of System: Fixed guideway transit on exclusive right-of-way, using Bridge transit deck. *Typical time and fare:* SF terminal to San Rafael (including connecting bus): 37 minutes, $1.20 one way (without discount for monthly or weekly commute). *Estimated Annual Cost:* $35.1 million in 1980, reducing progressively to $4.5 million by 2015. *Estimated Annual Cost per Passenger:* $313 in 1985, to $29 in 2015. *Benefit-Cost Ratio:* 1.05. *Weekday Daily Patronage:* 196,000 by 1985, 300,700 by 2015. *Peak Period Passengers:* 24,200 by 1985, 29,000 by 2015.



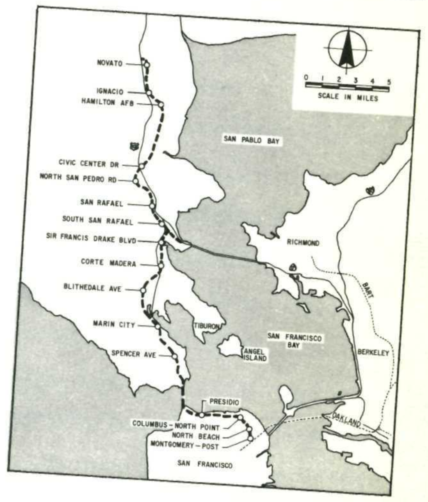
Alternative 2

Type of System: Fixed guideway transit on exclusive right-of-way, using transbay tube. *Typical time and fare:* SF terminal to San Rafael (including connecting bus): 27 minutes, $1.20 one way (without discount for monthly or weekly commute). *Estimated Annual Cost:* $35.9 million in 1980, reducing progressively to $4.6 million by 2015. *Estimated Annual Cost per Passenger:* $462 in 1985, to $38 by 2015. *Benefit-Cost Ratio:* 1.12. *Weekday Daily Patronage:* 135,800 by 1985, 229,400 by 2015. *Peak Period Passengers:* 23,400 by 1985, 35,400 by 2015.



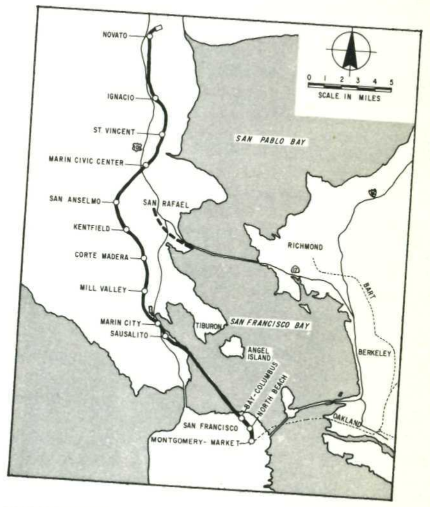
Alternative 3

Type of System: Bus rapid transit on exclusive right-of-way, using Bridge transit deck. *Typical time and fare:* SF terminal to San Rafael (including connecting bus): 29 minutes, $1.20 one way (without discount for monthly or weekly commute). *Estimated Annual Cost:* $17.5 million in 1980, reducing progressively to $1.1 million by 2015. *Estimated Annual Cost per Passenger:* $235 in 1985, to $10 in 2015. *Benefit-Cost Ratio:* 1.42. *Weekday Daily Patronage:* 130,200 by 1985, 208,900 by 2015. *Peak Period Passengers:* 17,400 by 1985, 27,800 by 2015.



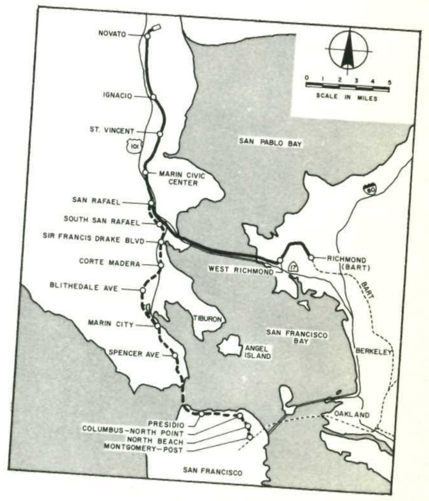
Alternative 4

Type of System: Fixed guideway transit on exclusive right-of-way, using transbay tube. *Typical time and fare:* SF terminal to San Rafael (including connecting bus): 28 minutes, $1.20 one way (without discount for monthly or weekly commute). *Estimated Annual Cost:* $35.6 million in 1980, reducing progressively to $7.2 million by 2015. *Estimated Annual Cost per Passenger:* $511 in 1985, to $69 in 2015. *Benefit-Cost Ratio:* 0.86. *Weekday Daily Patronage:* 123,200 by 1985, 208,500 by 2015. *Peak Period Passengers:* 21,600 by 1985, 35,200 by 2015.



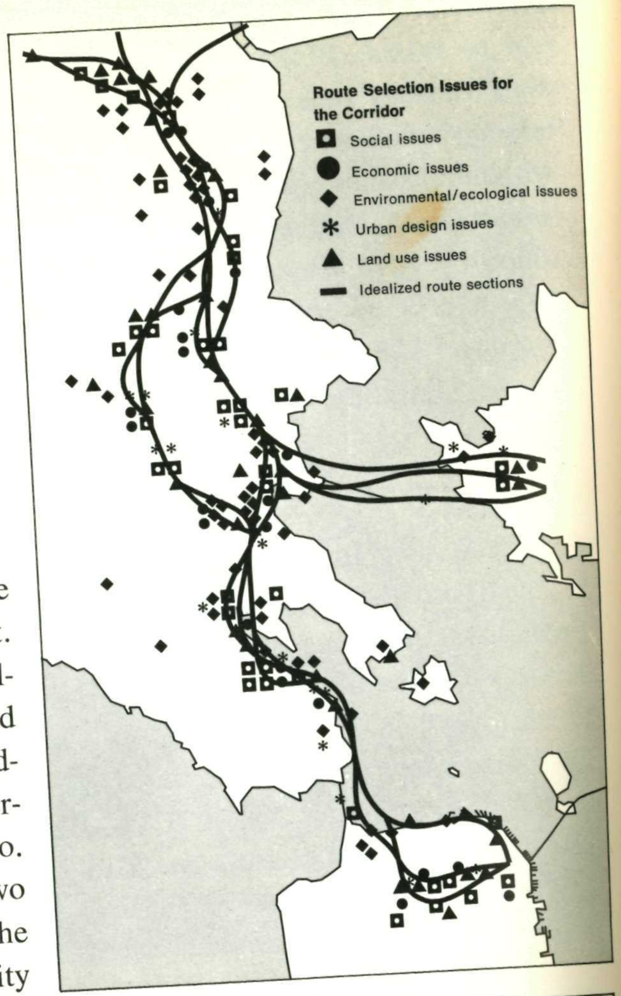
Alternative 5

Type of System: Exclusive busway from San Rafael to San Francisco, using Bridge transit deck; and rail line extension of BART from Richmond to San Rafael over second Richmond-San Rafael Bridge, then north to Novato. *Typical time and fare:* SF terminal via Golden Gate Bridge to San Rafael (including connecting bus): 29 minutes, $1.20 one way (without discount for monthly or weekly commute); Richmond to Novato, 34 minutes, 95¢ one way. *Estimated Annual Cost:* $36.4 million in 1980, decreasing progressively to $2.8 million by 2015. *Estimated Annual Cost per Passenger:* $531 in 1985, to $28 in 2015. *Benefit-Cost Ratio:* 0.72. *Weekday Daily Patronage:* 119,800 by 1985, 205,100 by 2015. *Peak Period Passengers:* 15,200 by 1985, 22,000 by 2015.



The environmental impacts of the five alternatives and the test alternative were examined in the Okamoto/Liskamm report. The charts shown here are graphic depictions of some of their evaluations. Each transit alternative—in sometimes subtle ways—would differently affect the region, the areas, the sections, and the individual communities of the Golden Gate Corridor. Four of the alternatives retained the business-commercial centrality of San Francisco. Another dispersed the basic business-commercial growth. Two alternatives provided new transit service to low-income sections; the others assumed municipal responsibility for providing intra-city transit. The routes, the station locations, the zoning, and all the other facets of each alternative could determine in the future how open space is used, whether growth is concentrated or dispersed, what sorts of disruption or dislocation are in store, and other such major community concerns. The Okamoto/Liskamm study report, like the Kaiser report, runs well over 100 double-size pages.

When the study criteria were applied to the "test concept"—using interim systems for long-range solutions—it was found that the District's plans for the Golden Gate Bus System and Fleet Ferry System would not be able to meet engineering and environmental criteria beyond 1980. The consultants did, however, regard these interim systems as creating significant short-term improvements that can likewise be compatible with, and complementary to, future rapid transit systems. After 1980, the interim systems could convert to the role of feeders and collectors. Standing by themselves after 1980, the interim systems would not be viable, and, according to estimates by the consultants and Citizens Advisory Panel, would cost the District economy and its citizens over $1 billion in lost time, stagnant property values, additional highway construction, compensating serv-


Route Selection Issues for the Corridor
■ Social issues
● Economic issues
◆ Environmental/ecological issues
✱ Urban design issues
▲ Land use issues
▬ Idealized route sections

Potential of Alternatives to Meet Regional Goals

Transportation Alternatives	1(a)	2(a)	2(b)	3(a)	4(b)	5(a)	6*
Reinforce City-Centered Concept of Regional Development	●	●	◐	●	◐	●	◐
Diminish Dependence on the Automobile	●	●	◐	●	◐	●	◐
Encourage Job Centers Outside San Francisco	◐	◐	◐	◐	◐	●	◐
Increase Minority Access to Jobs and Housing	●	●	◐	◐	◐	●	◐
Service Recreation Trips to Marin and Sonoma Counties	◐	◐	●	●	●	◐	●
Maintain Positive Existing Identities of Marin and San Francisco	●	●	◐	●	◐	●	◐

System Features and Operating Data

Transit Alternative	Length of Trunk Line (Miles)	Number of Stations	Travel Time and One Way Fare Between San Francisco CBD and Novato	San Francisco CBD and San Rafael	San Francisco CBD and Mill Valley	Richmond and Novato
1A	30	18	49 min. 140¢	37 min. 120¢	30 min. 100¢	38 min. 95¢
2A	27	12	39 min. 140¢	27 min. 120¢	20 min. 100¢	38 min. 95¢
2B	27	12	39 min. 140¢	27 min. 120¢	20 min. 100¢	38 min. 95¢
3A	28	16	43 min. 140¢	29 min. 120¢	23 min. 100¢	36 min. 95¢
4B	27	13	40 min. 140¢	26 min. 120¢	20 min. 100¢	45 min. 95¢
5A	41	16	45 min. 140¢	29 min. 120¢	23 min. 100¢	34 min. 95¢

Patronage

Transit Alternative	Peak Period Passengers at Maximum Load Point (One-Way)		Total Daily Patronage (Weekday)	
	1985	2015	1985	2015
1A	24,200	29,000	196,000	300,700
2A	23,400	35,400	135,800	229,400
2B	20,000	33,000	123,900	209,400
3A	17,400	27,800	130,200	208,900
4B	21,600	35,200	123,200	208,500
5A	15,200	22,000	119,800	205,100

Costs *(Millions of Dollars)*

Transit Alternative	Total Capital Requirement 1980	Annual Net Operating Surplus		Cumulative Net Operating Surplus to 2015	Annual Debt Service Charge	
		1980	2015		1980	2015
1A	987	0.6	4.8	72.5	35.7	9.3
2A	932	−2.1	5.4	21.4	33.8	10.0
2B	915	−1.7	3.1	0.1	33.1	10.2
3A	495	0.9	1.0	34.4	18.4	2.1
4B	944	−1.5	3.1	0.9	34.1	10.3
5A	944	−2.1	2.4	0.4	34.3	5.2

Benefit-Cost Analysis

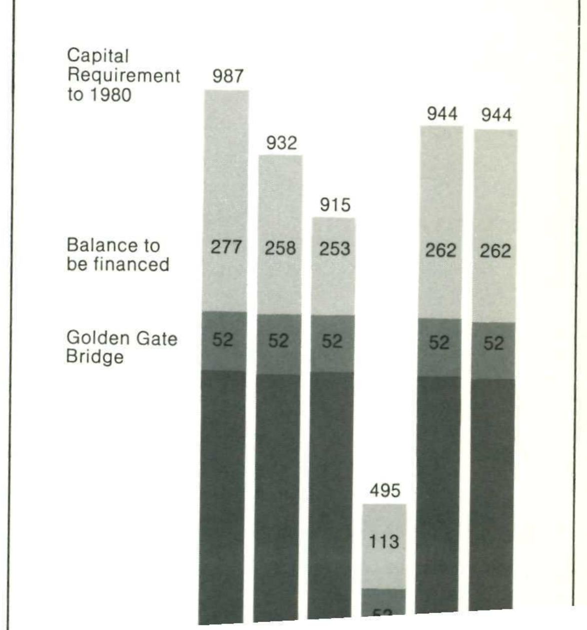
Transit Alternative	Total Benefit (Present Value) (Millions)	Total Capital Cost (Present Value) (Millions)	Benefit-Cost Ratio
1A	$754	$716	1.05
2A	763	679	1.12
2B	589	668	0.88
3A	528	372	1.42
4B	597	696	0.86
5A	497	692	0.72

Population and Employment Projections Used as a Basis for the Patronage Forecasts

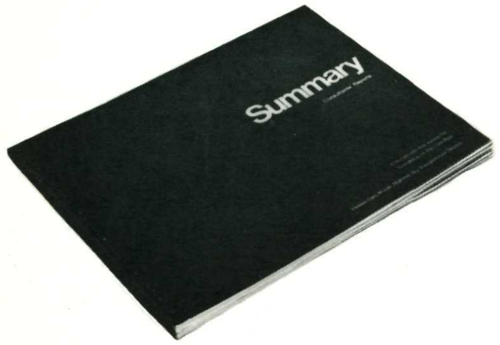
County	Year	Population	Employed Residents
Nine Bay Area Counties	1965 1990 2015	4,396,000 7,496,000 9,957,000	1,673,000 3,081,000
Marin			

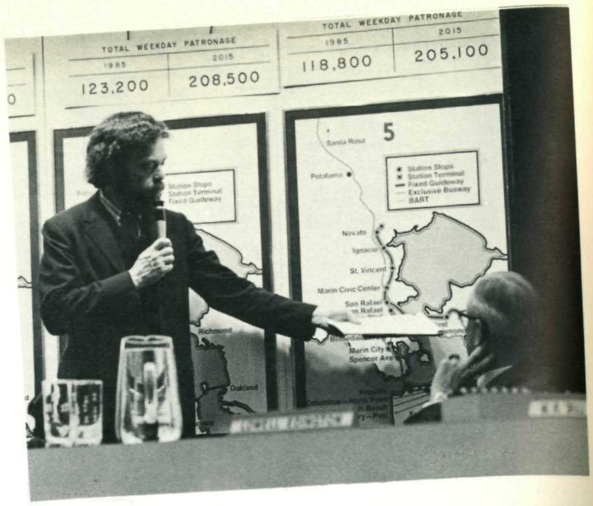
The "A" and "B" in the tables refer to differing highway networks.

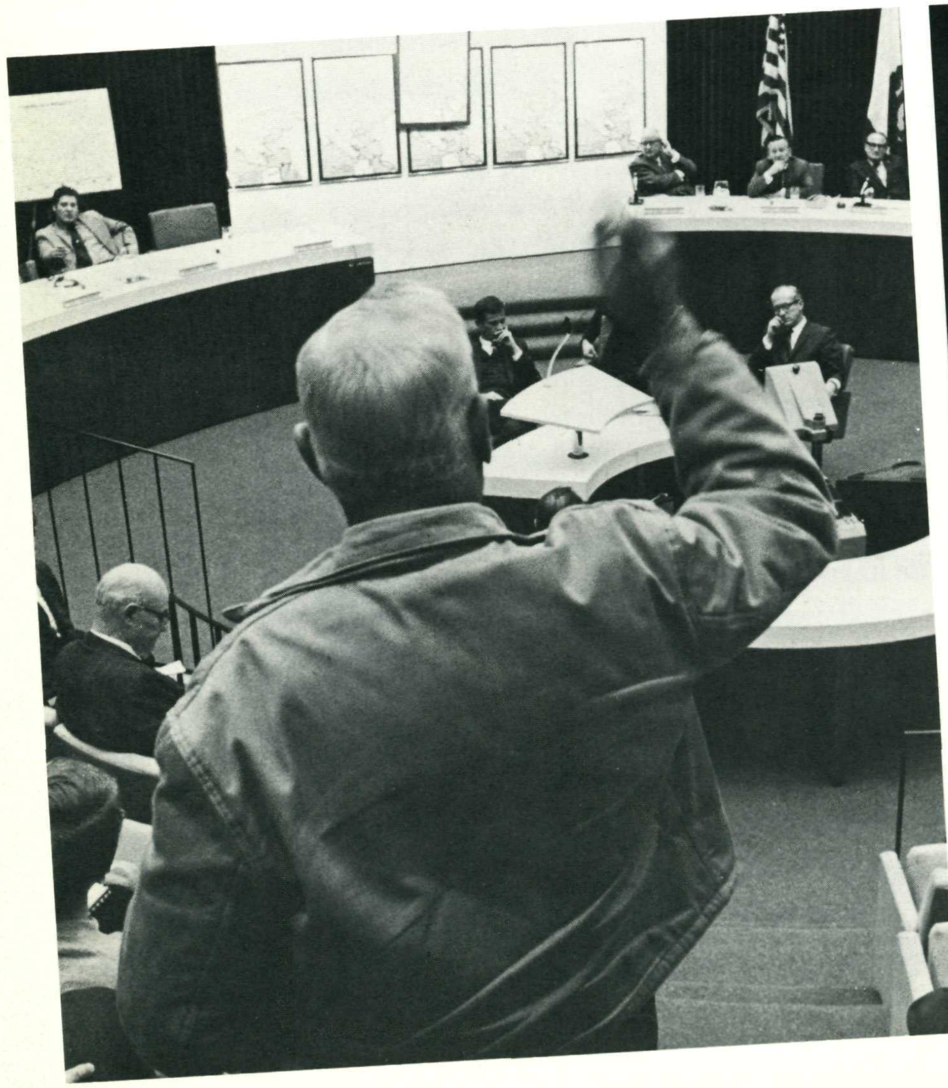
Funding Requirements *(Millions of Dollars)*

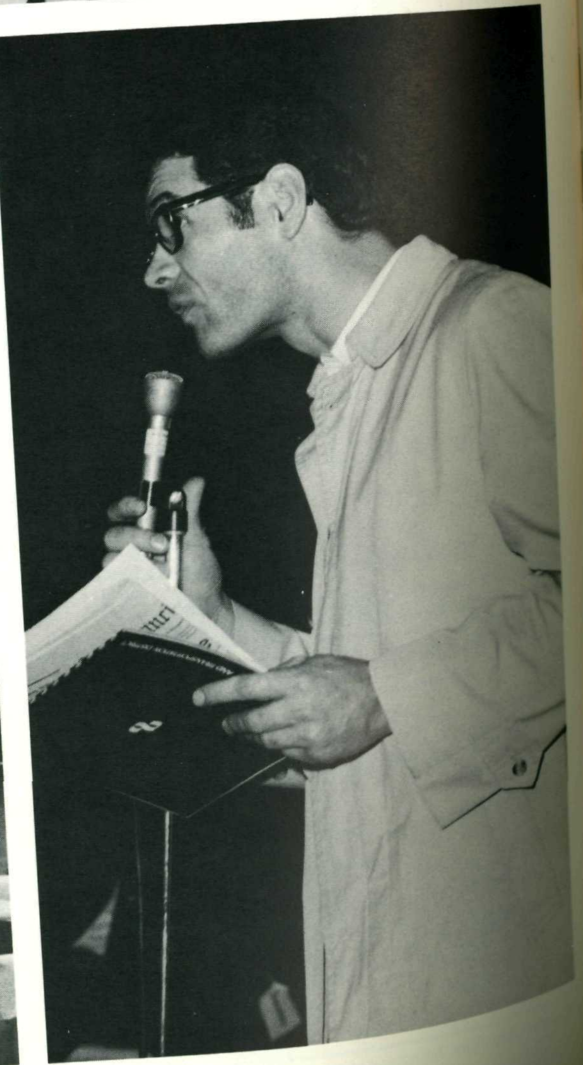


The Public Hearings









A. B. 584 says, in part, "In developing the transportation facilities plan, the District shall hold public hearings so that interested persons and organizations are provided an opportunity to express their viewpoints."

The District strongly agreed, and followed this direction fully and faithfully, scheduling and arranging 21 public hearings in the District's six counties in a concentrated 60-day period from December 3, 1970, to February 3, 1971.

Hearing schedules, with study summaries, were sent in advance to over 300 civic organizations, government agencies, individuals, and news media. Each meeting was publicized and advertised in advance through area and community newspapers, radio stations, and television outlets. And each meeting also received news coverage of its actual proceedings. Meeting posters were distributed to public libraries, civic organizations, and municipal offices. Thirty-five thousand schedule cards were handed out to motorists passing through the Bridge toll gates.

The 21 public hearings attracted better than 1,200 participants, for an average of about 60 per meeting. Considering the rather dry nature of the topic at hand, and a succession of nasty weather during December, the average attendance was considered good. The participation was attentive, lively, thoughtful, and productive.

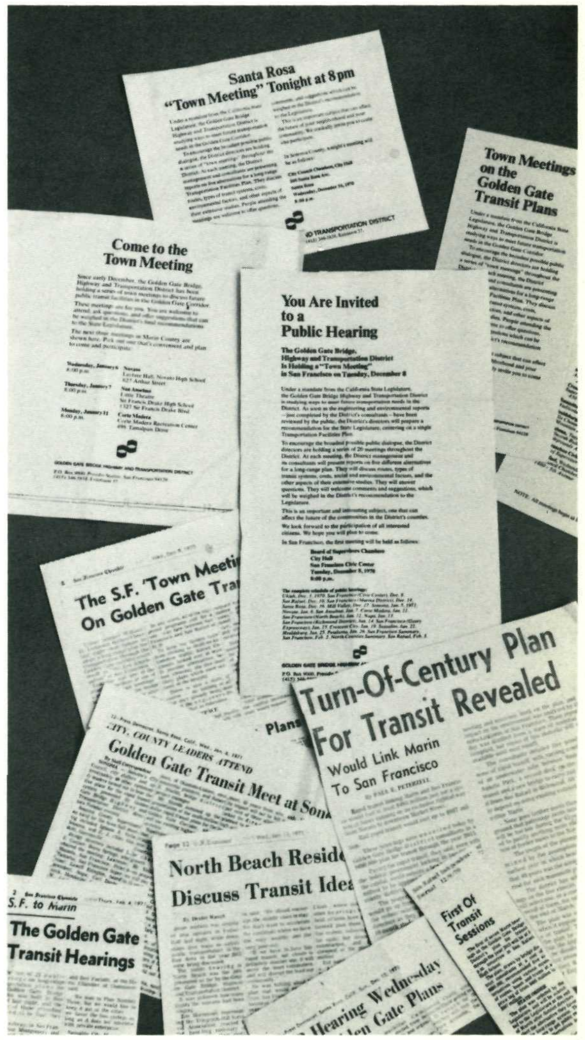
The meetings were held in the following order in the following cities: Ukiah, San Francisco (Civic Center), San Rafael, San Francisco (Marina District), Santa Rosa, Sonoma, Novato, San Anselmo, Corte Madera, San Francisco (North Beach), Napa, San Francisco (Richmond District), San Francisco (Geary Expressway District), Crescent City, Sausalito, Healdsburg, Petaluma, and Mill Valley. An additional Santa Rosa meeting was held at the invitation of the City Council. Finally, sum-up hearings were held in San Francisco and in San Rafael.

The hearings were conducted along the line of town meetings. The District's consultants and staff, using graphic displays, would outline the five-alternative systems, generally following the material in the printed study summaries which had been given to the audience. Following the informal presentation, the meetings were opened to questions and comments, and public dialogue was encouraged.

The District Board of Directors was well represented at every meeting, with the meeting chairmanship rotating among them.

Transcripts of the public dialogue of each meeting were made, with something like 2,500 pages of comments recorded. These transcripts are all being furnished as accompaniments to the District's master submissions to the State Legislature.

The extent to which the public was welcome to participate in the planning process—through the Citizens Advisory Panel and by way of the public hearings—was a frequent subject of favorable mention by citizens attending the hearings.


Santa Rosa "Town Meeting" Tonight at 8pm
Town Meetings on the Golden Gate Transit Plans
Come to the Town Meeting
You Are Invited to a Public Hearing
The S.F. 'Town Meeting' On Golden Gate Tra
Turn-Of-Century Plan For Transit Revealed
Would Link Marin To San Francisco
Golden Gate Transit Meet at Son
North Beach Resid Discuss Transit Idea
The Golden Gate Transit Hearings
First Of Transit Sessions

The meetings engendered position papers from several organizations, most of which took the trouble to study with care the District's summary of the consultants' reports and to have representatives at more than one meeting. At other times, many of the participants contacted the District staff to obtain clarifications and ask questions.

As the meetings progressed, précis of the audience's comments were prepared for the Directors, staff, and consultants so that they could review public comments in advance of the preparation of transcripts. When the transcripts were ready, they, too, were reviewed.

Following the conclusion of the hearings, the consultants and Citizens Advisory Panel prepared and submitted to the District their critiques and choices of the transportation alternatives, in the light of the discussions held and positions expressed at the public hearings.

There is no doubt that the "participatory" approach to planning taken by the District increased the amount of time necessary to complete studies and arrive at recommendations. Yet the process was healthy for the opportunity it provided the District's constituents to be its advisors and critics. And the process was worthwhile for the many valid concerns, important issues, and valuable insights which participants expressed and contributed.

These contributions became very much a part of the review made and the conclusions reached by the District's Directors, Management, project staff, consultants, and Citizens Advisory Panel as they formed their final recommendation.

Typical Comments on Hearings

"Earlier this week, the bridge district held its 22nd and final public hearing on these preliminary concepts and alternatives. This long, long series of widely publicized hearings has taken place at various strategic places throughout the six-county district. . . . Reactions varied widely, but there was one common point. There was almost unanimous approval of the way in which the studies were conducted and the way in which the hearings have been presented to the public."

San Rafael Independent Journal
February 6, 1971

"You have done a unique job in involving citizens. You have done one of the best jobs we have ever seen. These public hearings are another good example . . ."

Michael Fischer
San Francisco Planning and
Urban Renewal Association
Transportation Committee

"The members of the Central Marin League wish to commend your Board for its efforts to involve the community in these discussions. We agree that the citizen should be involved in the decision-making process and we're glad that you've provided an opportunity for our participation."

Mrs. Carol Staley
League of Women Voters of
Central Marin

"We wish to commend the District for its efforts to involve the citizenry more actively in its deliberations. This was done by the establishment of the Citizens Advisory Panel who worked directly with the consultants during the course of the study, and by the holding of public hearings . . . It may be more time-consuming and occasionally abrasive, but it is the best way for the Bridge District to fully appreciate the wishes of the public, and respond most effectively to them."

Conservation Committee
San Francisco Bay Chapter
Sierra Club